

# Improving Colorectal Cancer Referrals for Testing at a Rural Health Clinic: A Quality Improvement Project

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## PROBLEM STATEMENT

- The underutilization of colorectal cancer (CRC) screening is a public health concern.
- Early detection of CRC can lead to treatment and improve health outcomes.
- Records show that one-third of eligible adults in the U.S. have not been screened for CRC (American Cancer Society, 2022).

## PROJECT PURPOSE

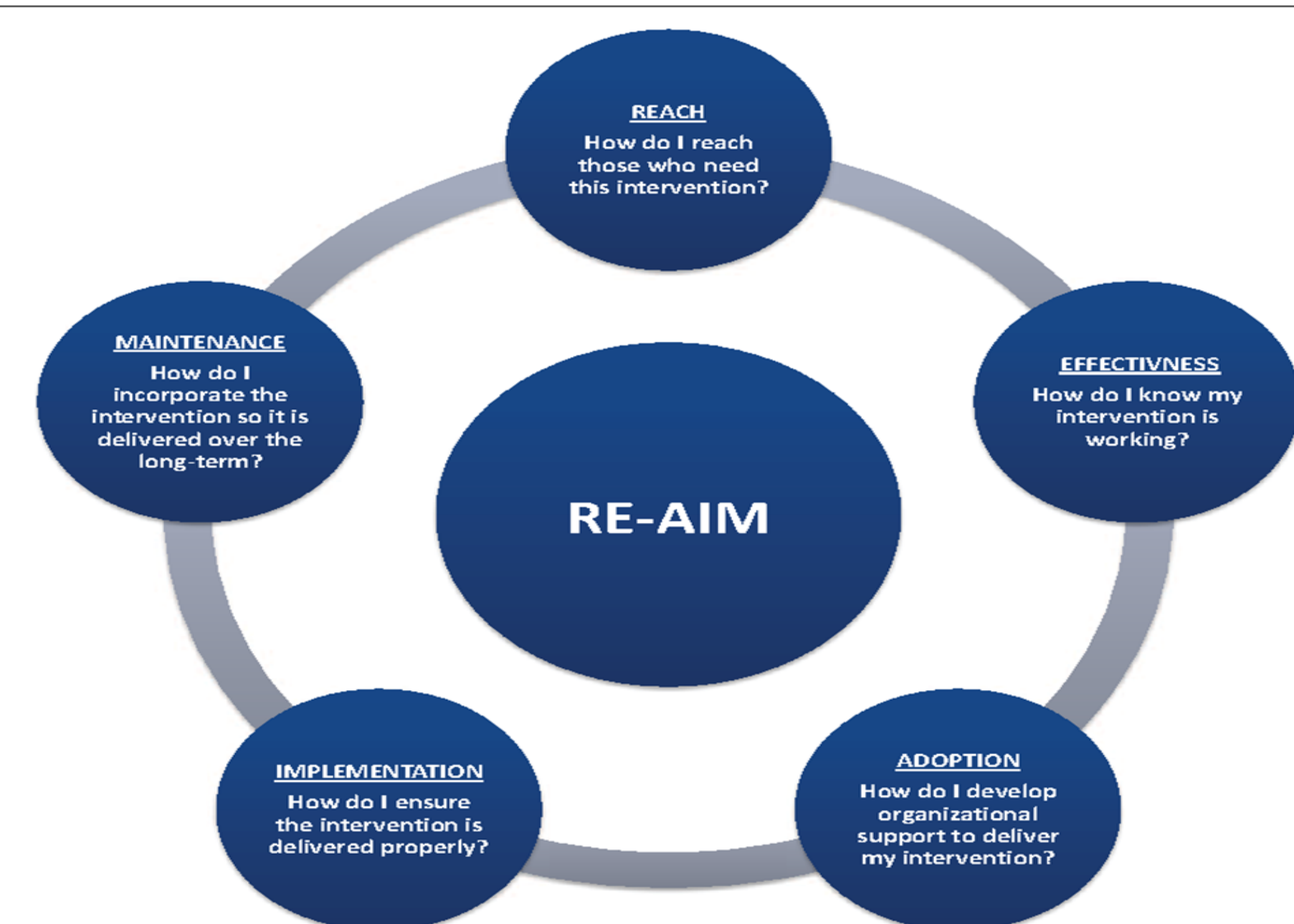
**PURPOSE:** To correct the CRC screening inconsistency and office workflow in a rural health clinic and improve provider documentation of CRC referrals for testing by implementing an evidence-based CRC protocol in hopes to improving health outcomes.

**AIM:** To evaluate if the implementation of a CRC protocol can increase provider referrals for testing and improve provider CRC screening documentation at a rural health clinic within 90 days.

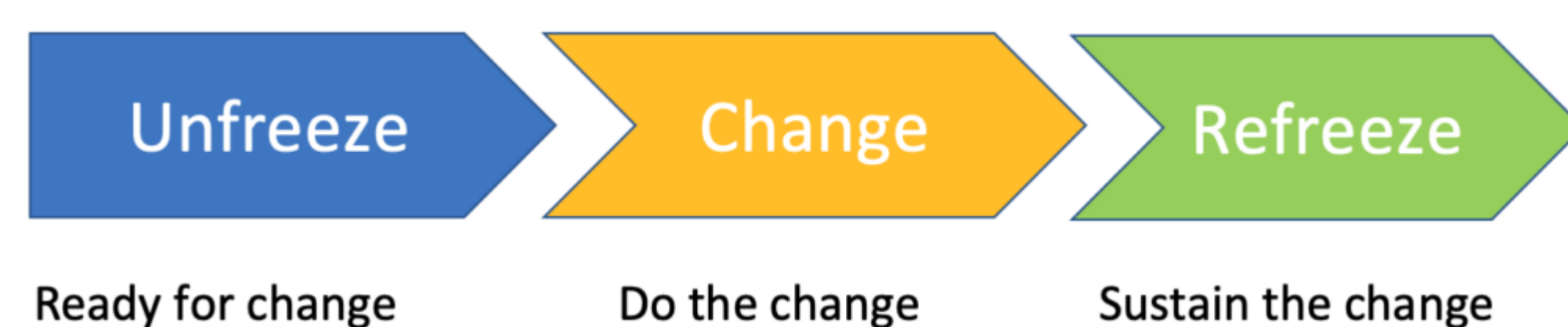
**CLINICAL QUESTION:** In all adult patients in a rural health clinic, between the age of 45 to 75, does the implementation of a Colorectal Cancer (CRC) protocol compared to current office practice, improve provider CRC screening documentation and completion of CRC referrals for testing by 5% in 90 days?

## MODEL & NURSING THEORY

### MODEL: The RE-AIM Framework



### NURSING THEORY: Lewin Change Theory



## METHODS

### Subjects and Sampling:

Consecutive Sampling: Adults 45-75 years of age who are at average risk for CRC.

### Inclusion Criteria:

- Average risk adults between the age of 45-75 and or with a documented diagnoses code of Z12.11 (encounter for screening for malignant neoplasm of colon).

### Exclusion Criteria:

- Those with gastrointestinal disorders such as crohn's disease, ulcerative colitis, diverticulitis, certain genetic conditions such as hereditary nonpolyposis colorectal cancer, familial adenomatous polyposis, a personal medical history of CRC history, and a history of abdominal or pelvic radiation to treat past cancer.

### Setting:

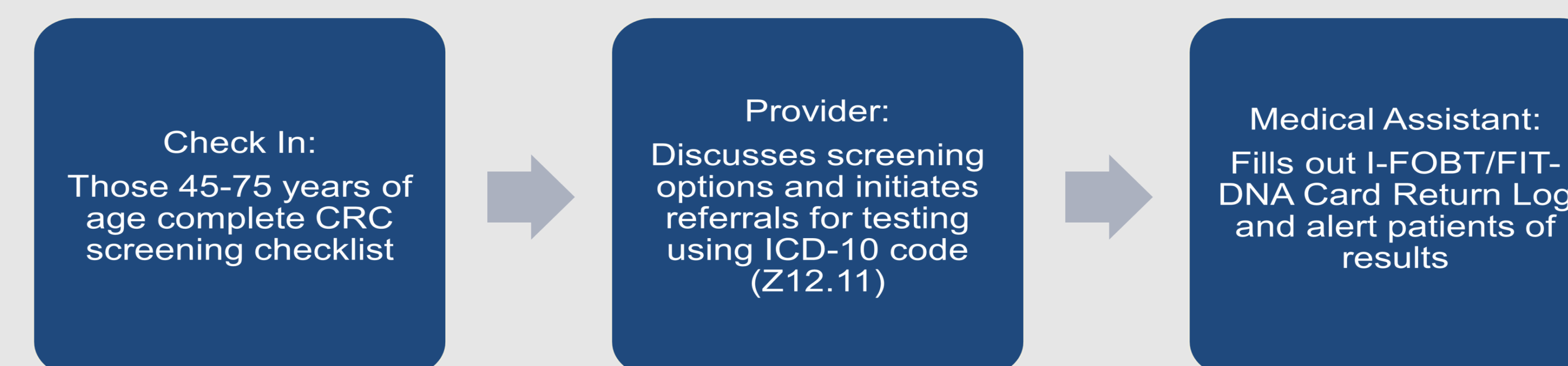
Low-income primary care rural health clinic in north Florida.

### Instrument/Tools:

- ICD-10 code (Z12.11) will be utilized for CRC screening referral for testing and to locate and track referrals in the clinic's Electronic Health Record.
- The Appraisal of Guidelines for Research and Evaluation (AGREE II) Instrument tool will be used to validate the CRC protocol content.

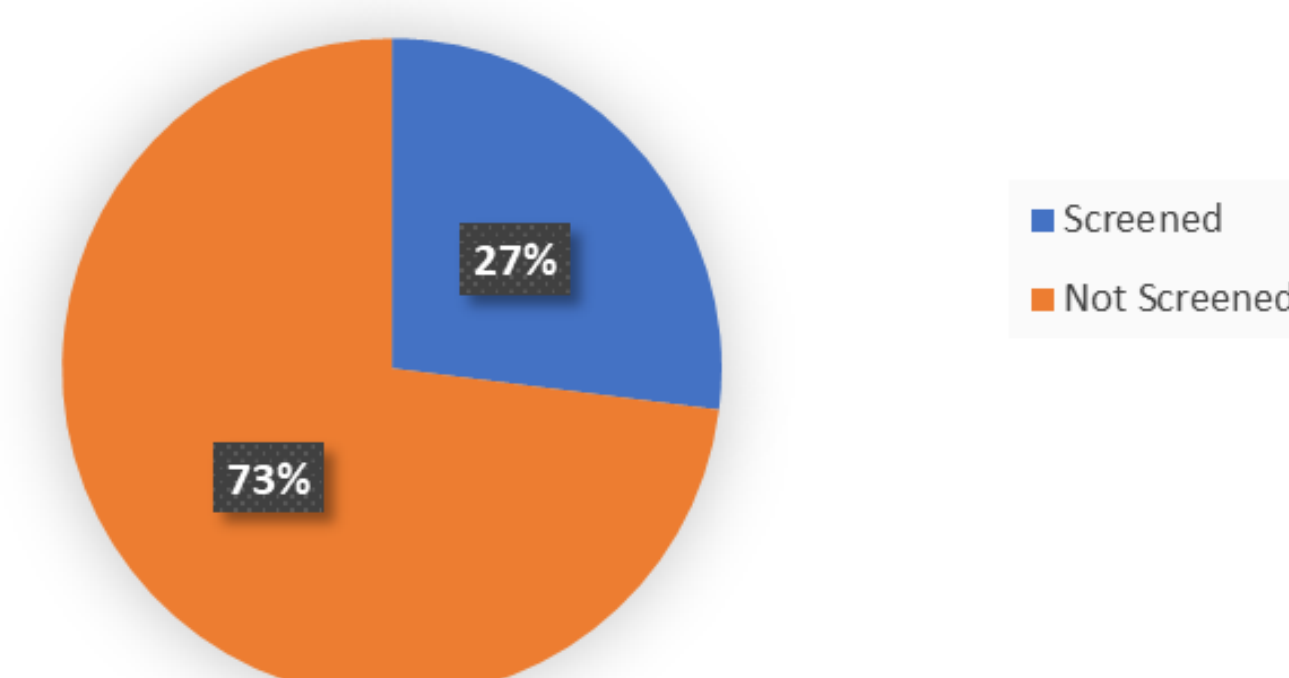
### Intervention and Data Collection:

- A retrospective study performed over a 3-month period between June 2022 and September 2022. The patients were identified using ICD-10 code (Z12.11) in the electronic database. All data were collected retrospectively from the EHR Advanced MD database and the I-FOBT/FIT-DNA Card Return Log.

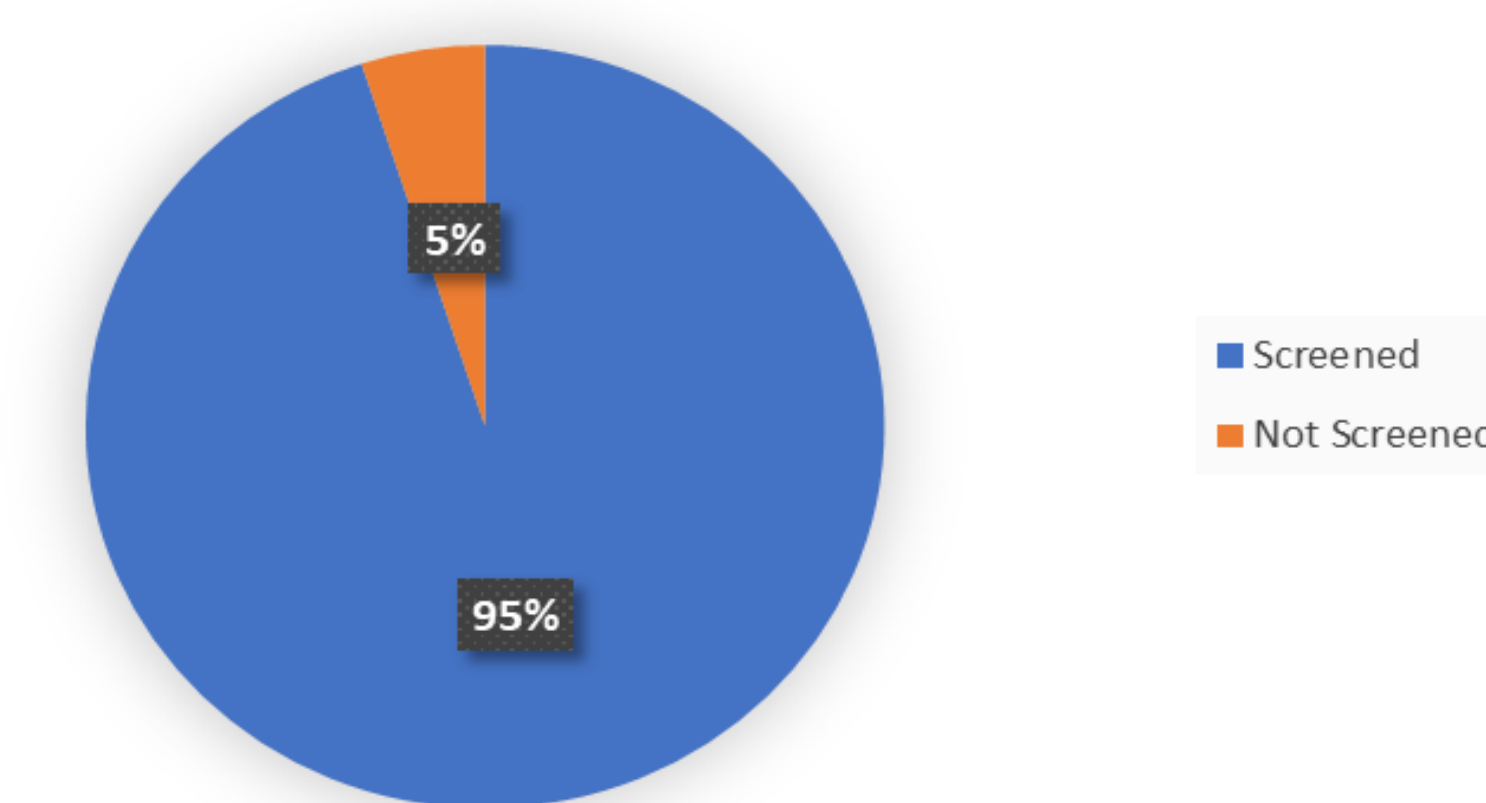


## RESULTS

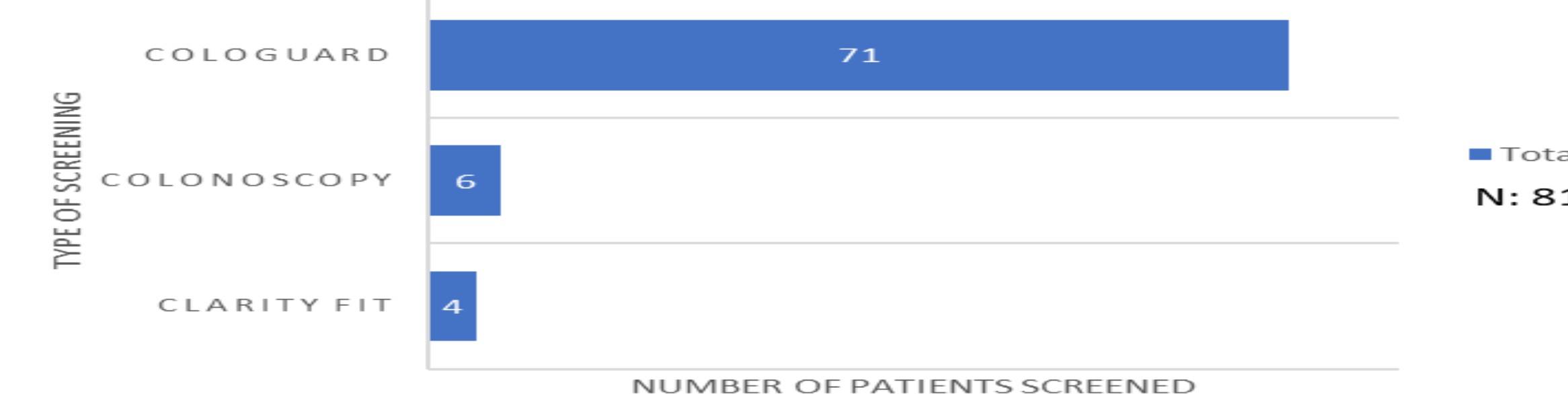
RURAL HEALTH CLINIC: 2017 CRC SCREENING RATE (AGES 50-75)



RURAL HEALTH CLINIC: 2022 CRC SCREENING RATE (AGES 45-75)



### CRC REFERRALS



## DISCUSSION

- The type of CRC screening methods include a fecal occult blood test or fecal immunochemical test (FIT) every year; stool DNA such as Cologuard every 3 years; colonoscopy every 10 years; computed tomography colonoscopy every 5 years; or flexible sigmoidoscopy every 5 years or every 10 years with the combination of annual FIT testing (USPSTF, 2021).
- The positive results of the DNP QI project did reveal that the use of a standardized CRC protocol increased CRC referrals for testing and improved provider documentation.
- Limitations include high staff turnover and inconsistency in distribution of the CRC screening checklist.

## IMPLICATIONS FOR ADVANCE PRACTICE NURSING

- A standardized evidence-based protocol provides a framework to improve CRC referrals for testing in a primary care setting.
- The CRC protocol addresses the screening gap in underserved populations to reduce morbidity and mortality linked to CRC.
- The QI project can influence the way care is implemented by having an organized and standardized approach to screening and clinical practice outcomes.

## SUSTAINABILITY

- The DNP QI project will be sustained in the organization with the CRC protocol in place and applied to the organization's system policy.

## REFERENCES

